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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,288	01/26/2004	Rade Petrovic	2073-136	6479
20028	7590	12/31/2007		
Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468			EXAMINER CALLAHAN, PAUL E	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 12/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

AK

**Office Action Summary**

Application No.

10/763,288

Applicant(s)

PETROVIC, RADE

Examiner

Paul Callahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-26 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-6 and 8-26 are pending and have been examined. This Office Action is directed towards the Applicant's response filed October 1, 2007.

#### ***Response to Arguments***

2. Applicant's arguments filed October 1, 2007 have been fully considered but they are not persuasive.

The Applicant argues in traverse of the rejections of claims 1-6 under 35 USC Sec. 103(a) as unpatentable over Leighton and Tewfik.

The Applicant argues that his claim 1 may be distinguished from the teachings of Leighton because in order to detect the watermark in watermarked data, the method of Leighton requires retrieval of an original watermark vector from memory with subsequent subtraction of a watermarked vector derived from watermarked data. The Examiner counters that such a step by Leighton does not distinguish his method from that set forth in the Applicant's claims as the method of Leighton still falls within a reasonably broad interpretation of the claim language, particularly when one considers that the original "baseline watermark" of Leighton is derived from the digital data to be watermarked (col. 3 lines 35-40).

The Applicant argues that the method of Leighton may be distinguished from that set forth in claim 1 by asserting that Leighton fails to teach the feature of correlating the encoded host signal with the auxiliary information carrier. The Examiner counters that such is indeed taught by Leighton at, for example col. 3 lines 45-67 where a correlation

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value is obtained by taking an inner product between a derived watermark and a baseline watermark. This reads on the Applicant's claim 1 since, again, the baseline watermark is itself derived from the original digital data to be watermarked.

The Applicant argues that Tewfik fails to teach the claimed feature of an auxiliary information carrier that is comprised of a plurality of signal components having varying amounts of offset or delay from one another. The Examiner counters that such is indeed taught by Tewfik at, for example, col. 3 lines 35-50 and col. 7 line 60 through col. 8 line 8, and particularly at col. 5 lines 43-67 where the process of watermarking a plurality of specific, discrete regions of video frames are discussed. Such discrete regions of video frames will comprise a plurality of signal components each having differing amounts of offset from one another.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tewfik, US 6,282,299, and Leighton, US 5,664,018.

As for claim 1, Leighton teaches a method for detecting the presence of auxiliary information symbols encoded onto host signals (abstract), comprising steps of: receiving an encoded host signal (fig. 2, col. 1 lines 51-65); detecting an auxiliary information carrier from said received encoded host signal (col. 1 lines 51-65), correlating said encoded host signal with said auxiliary information carrier to obtain a correlation value (fig. 2, col. 1 lines 51-65); and detecting the presence of said auxiliary information symbols from said correlation value (fig. 2, col. 1 lines 51-65). Leighton does not teach wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amount of delay or offset from each other. However Tewfik dos teach such a step (col. 3 lines 35-50, col. 7 line 60 to col. 8 line 8). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Tewfik into the system of Leighton. It would be desirable to do so as perceptual masking of embedded data would decrease the signal degradation of watermarked content.

As for claim 2, Leighton teaches the method according to claim 1, wherein said auxiliary information symbol detecting step comprises the step of determining a sign of said correlation value (col. 3 lines 55-65).

As for claim 3, Leighton teaches the method according to claim 1, wherein said auxiliary information symbol detecting step comprises the step of determining a magnitude of said correlation (col. 3 line 52 to col. 4 line 2).

As for claim 4, Leighton teaches the method according to claim 1, wherein said auxiliary information symbol detecting step is used for copy management purposes (col. 2 lines 45-60).

As for claim 5, Leighton teaches the method according to claim 1, wherein said auxiliary information symbol detecting step is used to limit unauthorized copying of said host signal (col. 2 lines 45-60).

As for claim 6, Leighton teaches the method according to claim 1, wherein said auxiliary information symbol detecting step is used for at least one of broadcast and playback monitoring of said host signal (col. 2 lines 20-40: an attempt to remove a watermark will result in signal degradation, thereby identifying an illicit copy during broadcast or playback).

***Allowable Subject Matter***

5. Claims 8-26 are allowed.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

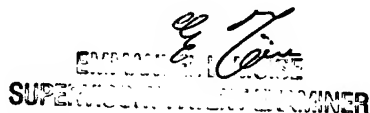
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



/Paul Callahan/  
December 20, 2007



SUPERVISOR  
SUPERVISOR